

REMARKS

Claims 1 to 7 are pending in the Application. Claims Claims 8-9 are withdrawn. Support for these amendments is found in the specification on page 3, line 31 to page 4, line 14; page 5, lines 16-20; and page 13, last two lines.

These amendments to the claims now allow them to be distinguished from the disclosures of the references cited in the Information Disclosure submitted with this Amendment.

Specifically:

Regarding citation JP20022517427A:

The compositions disclosed in JP20022517427A all involve the physical blending of two different polymers rather than the preparation of the blend using a multistage polymerization process. One of ordinary skill in the art would not expect that a multistage polymerization process would provide a polymer blend with the same properties as that obtained when the polymers are physically blended together.

Regarding GB1356395:

Again, the compositions disclosed in GB1356395 also all involve the physical blending of the two different polymers.

Regarding Japanese Patent Publication (kokai) No. 103513/92:

Japanese Patent Publication (kokai) No. 103513/92 describes polymer compositions for use in nail enamels. By their very nature, the polymers used in such compositions dry to form water insoluble films. Otherwise, the nail enamel would be removed whenever the nails were exposed to water. Thus, the problem addressed by the compositions of citation 2 is to provide a polymer composition which will dry to a water insoluble film. These polymers useful in such blends are significantly different than those disclosed in Applicants' invention. Applicants' invention is to provide a polymer blend used in hair styling compositions. One of the key properties of such compositions is that they are easily removeable (see the specification, page 1, line 23). Thus, the problem addressed by the compositions of Japanese Patent Publication (kokai) No. 103513/92 and Applicants' invention are markedly different and would require blends of polymers with markedly different properties.

Regarding JP2001089325A:

JP2001089325A describes a composition of a first film forming property polymer system and a second non-film forming property polymer system which are dispersed in a liquid lipid. The key difference here is that both of the polymers in the blend of Applicants' invention are film forming polymers. One skilled in the art would not be directed to substitute the non-film forming polymer of JP2001089325A with another film forming polymer. Thus Applicants' invention is distinguished from JP2001089325A. In addition, it appears that the polymers in the blends of JP2001089325A are dispersed in the liquid whereas applicants polymers are soluble in the solvents used in the composition (see the specification, page 7, lines 3-5). This provides an additional distinguishing characteristic.

Regarding US6,001,338:

US6,001,338 discloses a composition of a film forming polymer (in solution or dispersion) in combination with a suspension of microfibrils of natural origin. It is critical in these compositions that the microfibrils maintain their structure as elongate rigid particles. This citation is distinguished from Applicants' polymer blend in two ways. First, the microfibrils are in suspension, not solution. Second, the microfibrils are comprised of natural polymers whereas both of Applicants' polymers are comprised of ethylenically unsaturated monomers.

Regarding US6,805,872 B2:

US6,805,872 B2 discloses cosmetic use of block ethylenic copolymers of elastic nature comprising at least one rigid block and at least one flexible block. Thus, US6,805,872 B2 does not disclose the use of a blend of polymers, whether physically blended or prepared by a multistage polymerization process, but, rather, a single polymer with regions having different properties. This is one solution to the problem addressed in Applicants' patent application (see page 2, lines 3 to 14). However, the disadvantages of this solution are what prompted Applicants' to discover their solution which was to prepare a blend of two different polymers using a multistage polymerization process.

Prior rejection under 35 USC 102(b) in the Office Action dated Nov. 16, 2006

Claims 1-7 are rejected under 35 USC § 102(b) as being anticipated by US Patent 6,136,884 ("884"). The Office Action states that '884 discloses a latex composition for hair care

which comprises a hybrid graft copolymer further comprising at least two distinct polymers similar to those of Applicants' invention.

As now amended, Applicants claims are now limited to mixtures of polymers prepared by a multistage process. Polymers prepared by multistage processes are inherently different than polymers prepared using block copolymerization processes. A block copolymer is made by one of a number of rather specialized processes to allow the sequential addition of two (or more) different monomers to the same chain, e.g., A-A-A-A-B-B-B-B. The multistage copolymers of Applicants' invention are made by more conventional (i.e., statistical) polymerization processes. Sequential addition (i.e., multiple stages) of two different monomers under these conditions will result in a mixture of the two homopolymers (e.g., A-A-A-A + B-B-B-B) being produced in the same process. A polymer made up of blocks of different monomer units in the same chain will inherently possess different properties than a composition made up of a mixture of two or more homopolymers or copolymers.

With this amendment, Applicants believe that the claims are distinguished over the references cited in the Information Disclosure Statement and the reference cited in the prior Official Action and are in condition for allowance. Should the Examiner have any suggestions which may put the Application in better condition for allowance, Applicants' attorney is willing to discuss any such suggestions either by phone or at the U. S. Patent and Trademark Office.

Respectfully submitted,



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